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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/551,408	04/18/2000	Yehuda Ivri	016770-002721US	2446

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TOWNSEND and TOWNSEND and CREW LLP
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EXAMINER

MCEVOY, THOMAS M

ART UNIT	PAPER NUMBER
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3731

MAIL DATE	DELIVERY MODE
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09/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/551,408	Applicant(s) IVRI ET AL.	
	Examiner THOMAS MCEVOY	Art Unit 3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 40-56 is/are pending in the application.
- 4a) Of the above claim(s) 44-56 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 40-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 14th 2008 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 40-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robertson, et al. (US 5,487,378) in view of Maehara et al. (US 4,533,082).

Robertson et al. disclose a method of aerosolizing a liquid including the steps of electroforming a metal or metal alloy plate (e.g. nickel; col. 11, lines 22-23) to have apertures which taper smaller going from a back surface to the front surface where the droplets will be released; providing liquid at the rear surface of the plate; and vibrating the plate to eject fluid droplets through the apertures (col. 2, lines 48-64; col. 3 lines, 24-52; col. 11, lines 21-23). Robertson et al. do not disclose that the aperture plate has a dome shape. Maehara et al. disclose that an aperture plate 13a for an oscillating

nozzle (Figure 1) can have a dome shape in order to spread-out the spray pattern (col. 3, lines 7-10). It would be obvious to one of ordinary skill in the art in view of Maehara et al. to form the aperture plate in a dome shape in order to spread out the spray pattern for a given application. Robertson et al. do not specifically disclose that the electroformed plate metal is palladium, palladium alloy, palladium nickel or palladium-cobalt. Robertson et al. do disclose that the plate can be made like a microsieve and electrofomed out of nickel as just one example (col. 3, lines 32-34). The selection of palladium and palladium alloys (including the claimed ratio) to entirely form or at least coat the plate would have been obvious since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416. Palladium and cobalt are known materials in the art for providing corrosion resistance to aperture plates and microsieves.

Response to Arguments

4. Applicant's arguments filed April 14th 2008 have been fully considered but they are not persuasive. The base reference to Robertson et al. teaches of electroforming a plate having the claimed tapered apertures. Therefore, the only missing element is the material from which the plate is made and the plate being dome shaped. As the plate material is clearly not a new concept in these aerosolization plates, as evidenced by Abys et al. and Marks et al. (cited in prior office action), electroforming a tapered-aperture plate using the claimed materials would have been obvious. Applicant states that Robertson et al. teach away from any material other than nickel because the

disclosure is limited to nickel. This argument is not persuasive. Unless a disclosure alludes to other non-disclosed materials as being undesirable or unusable for specific reasons, or why the only disclosed material can be used for specific reasons, the lack of a disclosure of other materials is not a teaching away of other materials. In actuality, Robertson et al. also disclose that silicon, germanium or plastic material can also be employed (see col. 3 lines 14-36). This hardly teaches away from the use of other materials. In fact, Robertson et al. leave open the methods for producing their plate to the entire field of microsieve manufacturing and give "e.g., electro forming in nickel" as only one example. The use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain. In re Heck, 216 USPQ 1038. Furthermore, disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. In re Susi, 169 USPQ 423. One of skill in the art would have had every reason to have expected success in producing a vibration plate having utility in the field of applicant's invention and the prior art when making the proposed combination and exchange of known materials. Exchanging the metals for the plate would have produced a predictable result of an electroformed plate usable for the intended use of aerosolizing a medicinal substance and would produce a plate with the advantages of the palladium alloys noted above. It is a mere substitution of one known element for another known element to obtain these predictable results. Choosing palladium or a palladium alloy would have been obvious to try as it would be one of a finite number of identifiable

materials which would have been predictable solutions for choosing a material capable of being electroformed into such a drug aerosolization vibration plate.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Witte (US 4,844,778) discloses a microsieve with tapered apertures (Figure 2a) which is electroformed out of nickel and has a cobalt or noble metal coating to provide corrosion resistance (col. 2, lines 7-13).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Mcevoy whose telephone number is 571-270-5034. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Manahan can be reached on 571-272-4713. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Todd E Manahan/

Supervisory Patent Examiner, Art Unit 3731